User's Manual (English)

SIP-telephone with answering machine and system functions*

tiptel 83 VoIP

* only in connection with tiptel.com 410-811

tiptel

About this telephone

This telephone can be used in a local area network in connection with a gateway or DSL modem for SIP telephony. Apart from a network connection you will need a SIP account or telephone system that supports SIP. In connection with the telephone system tiptel.com 410-811 you can also benefit from the telephone's system functions. In this case the SIP account will be provided by your tiptel.com telephone system. Eventually you will need an enhancement for your tiptel.com telephone system. Please contact your specialist dealer for details.

More useful application notes will be available on our homepage (http://www.tiptel.com).

For setting up this telephone you will need substantiated experience in the configuration of VoIP / SIP-telephony systems as well as a well-grounded knowledge of your network infrastructure.

Please consult your specialist dealer or an experienced technician in case you need help or you have any questions.

If you experience problems while setting up or operating tiptel 83 VoIP use of a network analyzer might be helpful. A free analyzer is available from e.g. http://www.wireshark.org/.

About this User's Manual

In this Manual configuration and operation of the telephone is described. In case your network does not assign IP addresses automatically ((DHCP-Server), before starting your configuration via your browser some basic settings will have to be carried out. Configuration via a browser for an experienced technician and so will only be treated in this Manual as far as it is necessary. All operating steps refer to the operation at the telephone unless this is noted otherwise.

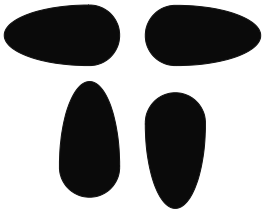
☞ Web configuration offers you more settings than the configuration at the telephone itself. As soon as you have carried out "First steps" starting on page 15 you should continue configuring the telephone via a web browser.

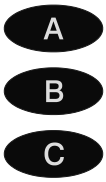
Safety notes

Please make sure to observe the following when installing , and operating tiptel 83 VoIP:

- This telephone was designed to be operated in an Ethernet network complying with the Standard IEEE-Norm 802.3 which is in accordance with the Standards for SELV circuits.
- This device is an IP telephone. Do **not** try to connect it to a conventional ISDN or analogue telephone access.
- Connect the connection cable only to outlets designed for this type of connection.
- Install all cables accident proof. Connected cables may not be stressed mechanically.
- Position the telephone away from any electrical sources of interference.
- Use only accessories that are approved for this telephone.
- Never try to open the telephone. Do not touch the connectors with sharp or metallic devices.
- The battery cover at the bottom of the telephone has no function and so has been locked with a screw. It must not be opened.
- Clean the telephone only with a soft damp cloth. Do not use any chemicals or abrasive detergents.
- Protect the telephone from humidity, dust, water, and vapours.
- Do not use the telephone at locations with direct sunlight.
- Do not use the telephone in explosive areas.
- Only use the original AC adapter (part-no. 4569175) that came along with your telephone.

Key assignment

	Menu key: Starting the menu selection
	Escape: Exiting a menu
	Call lists: Calls in absence, re-dial list, incoming calls list
	Increase volume: Stand by: Ringer volume Hands free: Loudspeaker volume Off hook: Handset volume
	Decrease volume: Stand by: Ringer volume Hands free: Loudspeaker volume Off hook: Handset volume
	Network status: IP address mode (static, dynamic) IP address Gateway
	SIP Status: Registration status of the SIP Accounts Registration status Telephone number SIP proxy
	MOH: The caller will hear music on hold. This feature depends on your SIP provider.
	Telephone book: Entering and selecting entries
	**Control keys**: Used for navigation and settings

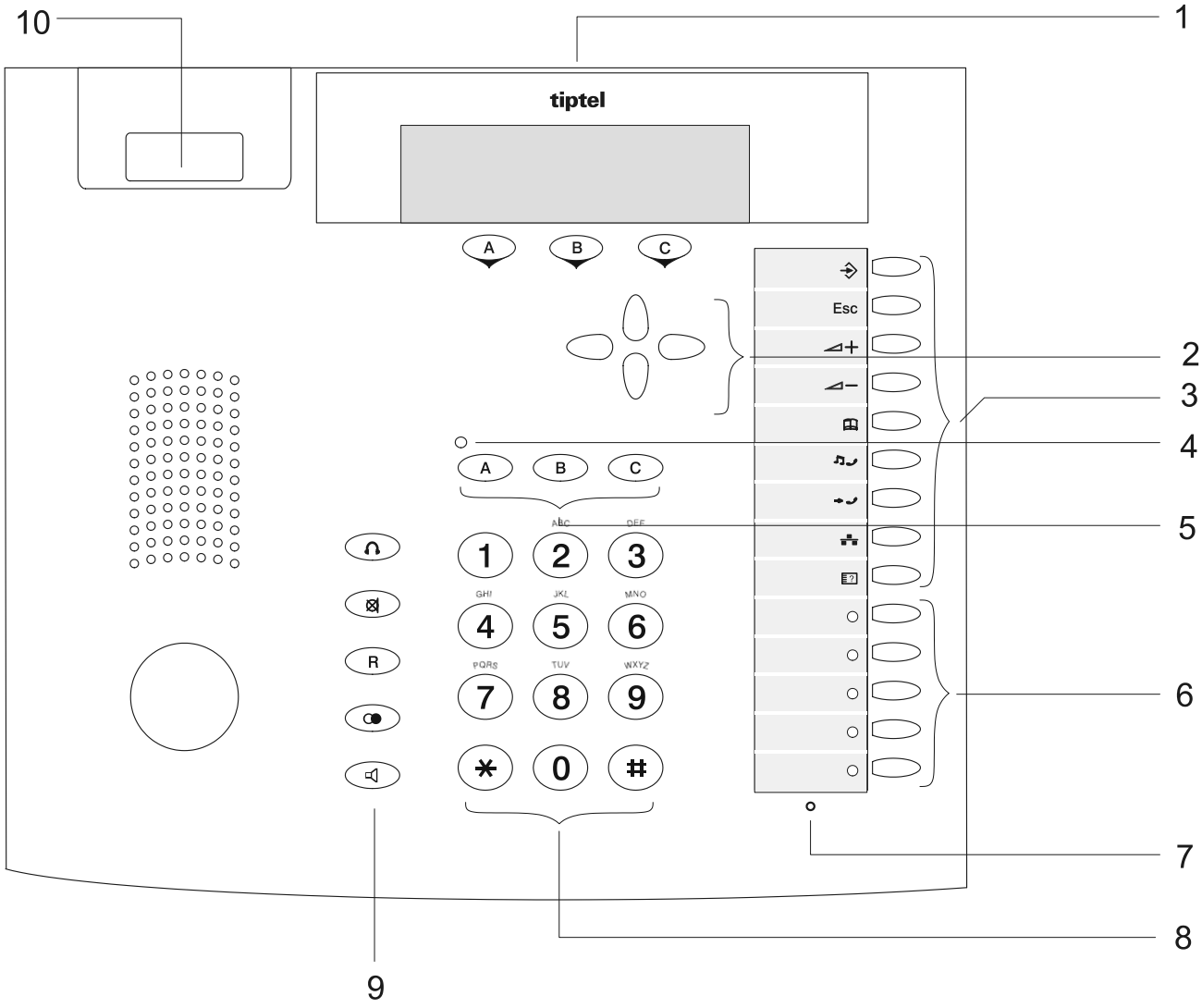
	**Soft keys**: For fast selection of functions, menu items, and input boxes which appear in the LCD above the corresponding icons.
	Headset key: Press this key in case you wish to use the (optional) headset.
	Mute key: Turns off the microphone while your having a telephone call
	R-Taste: Query key. Press this key to set up a new call or to switch between two calls.
	Redial key: Re-dials the last number dialled.
	Loudspeaker: Starts dialling a selected or entered telephone number. Turns on/off line while using hands free mode or headset (connector HS1). Switches to hands free while having a call off hook. **Tip:** Keep that key pressed down for 3 seconds in case you wish to additionally turn on the loudspeaker during a call.
	Digits: Used for entering numbers or dialling telephone numbers.
	Asterisk, hash: Needed for entries and special functions

Special characters

For faster access with some settings particular keys have multiple functions as follows:

1	**1 @**
2	**2 a b c A B C**
3	**3 d e f D E F**
4	**4 g h i G H I**
5	**5 j k l J K L**
6	**6 m n o M N O**
7	**7 p q r s P Q R S**
8	**8 t u v T U V**
9	**9 w x y z W X Y Z**
*	*** . (dot)**
#	**#**

Controls



1. LCD	Shows telephone number, date and time, as well as additional information.
2. Control keys	For navigation and settings
3. Misc. keys	see "Key assignment".
4. MWI-LED (red)	Flashes in case calls have not been taken. Stops flashing once you completely browsed through the list of new incoming calls in absence.
5. Soft keys	For fast selection of functions, menu items, and input boxes which appear in

	the display above the corresponding icons.
6. Function keys	In the web configuration these keys can be assigned with particular functions. When used as a system telephones at a tiptel.com telephone system these keys will be programmed by the telephone system.
7. Microphone	For hands free operation
8. 0 – 9, *, #	Digits
9. Misc. keys	Headset Microphone mute key Query key Re-dial key hands free / loudspeaker
10. Hook switch	Press this switch to end a call. Handset is on hook or off hook.

Display icons

1. Handset on	You can use the handset
2. Headset on	You can use the (optional) headset
3. Hands free / Loudspeaker on	You can have your call hands free or the loudspeaker is on so that people in the same room can listen to the caller as well
4. Call counter	Shows the number of incoming calls

Index

About this telephone **3**
About this User's Manual 3
Safety notes **4**
Key assignment **5**
Special characters 7
Controls **8**
Display icons **10**
Index **11**
First steps **15**
Scope of delivery 15
Optional accessories 15
PC software 15
Set up 15
Installation 16
Explaining the steps of operation 18
Factory default settings 18
Overview (selection): 19
Language settings 19
Network settings 21
Basic settings 21
Checking the network status 21
Programming a SIP account 29
Assistant, configuration wizard 30
Application notes 30
Operation as a system telephone with tiptel.com 410-811 30
Configuration **33**
General telephone settings 33
Display settings 33
Ringing signal 33
Handset and hands free volume 34
Greeting word 34
Language 34
Date and time 35
Call forwarding 35
Automatic call accepting 36
Programming the function keys 36

General SIP settings 37
Miscellaneous settings 38
Dialling assistance 39
Baby call, hotline 39
Digital Map 39
Rules 40
Dial peer, editing a dialled number, speed dial 41
Dial locks 43
Block outgoing calls, external line access 43
Black list 43
Blocking incoming calls from certain numbers 43
Call waiting 43
Do not disturb 44
Call Filter 44
Limiting calls by comparing telephone numbers 44
Users and passwords 45
Changing the keypad password 45
Access to web configuration 45
Network Setting 47
WAN-Connect mode 47
PPPoE settings 47
WAN settings Static network 48
LAN settings 48
DHCP settings 50
Port configuration 51
Special settings when operating as gateway 51
NAT – Network address translation 51
DMZ – Demilitarized Zone 52
SIP Setting 53
SIP account basic settings 53
SIP account advanced setting 55
SIP STUN settings 57
Miscellaneous SIP settings 58
QoS 59
RTP ports 59
Update and back up 61
Restore factory default settings 61
Restore factory default (lost password) 61
Firmware update 62
Latest firmware version 63
Back up Configuration 63

Telephone functions / using the telephone 64
Place a call 64
Incoming calls 64
Reject a call 65
To place a call 65
Automatic external line access 65
Dialling 65
Indirect dialling (Prepare dialling) 66
In call state 67
Query 67
Call waiting 68
Connect 69
Call connecting without notification 69
3 party conference 70
Monitoring 71
Notes 71
Speaker phone, hands free 73
Headset 74
Call lists 75
Call lists 75
General 75
Open call lists and place calls 75
Incoming call 76
Outgoing call 77
Telephone book 78
Enter a new telephone book entry 78
Call a number from the telephone book 81
Edit/delete a number from the telephone book 82
Transfer a telephone book entry from a list 83
Answering machine 84
Individual announcement 84
Record an Individual announcement 84
More settings 85
Recording on/off 85
Pick up a call from the answering machine 86
Play back/delete messages 86

Annex **88**
Service 88
Guarantee 88
CE mark 89
Environmental compatibility 89
Trouble shooting 90
Factory default settings 91
Technical specifications 91

Index **92**

First steps

Scope of delivery

First, please check if the scope of delivery is complete. In gift box of your tiptel 83 VoIP you should find:

- tiptel 83 VoIP handset inclusive
- Coil cord (handset cord)
- AC adapter 9V / 500 mA
- Ethernet cable
- User's Manual

Please keep the gift box. You will need it in case you have to send the telephone back to your dealer.

Optional accessories

Following accessories are available from your specialist dealer:

- Headset

A list of compatible headsets you may also find in our homepage (http://www.tiptel.com) under details to this telephone.

PC software

PC based configuration is carried out via a web browser which usually is part of your PC's operating system.

Set up

Your tiptel 85system has been produced for normal operating conditions. Solvents found in furniture varnish, polish, or oil can attack the base pads. Pads etched this way may leave traces on the furniture. Therefore use a non-slip underlay, especially for new or freshly treated furniture.

Installation

For installation please connect the cables that came along with your telephone as follows:

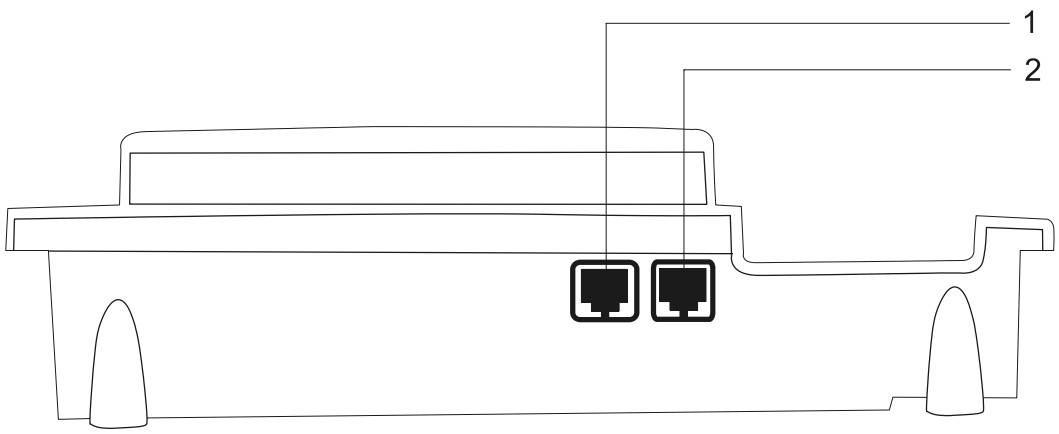
1 Coil cord with its long end to the connector with the handset icon and with its short end to the connector of the handset .

2 Connect Ethernet cable with one plug to the "LINE" ("WAN") connector and with the other plug to your network or with the modem from your DSL connection.

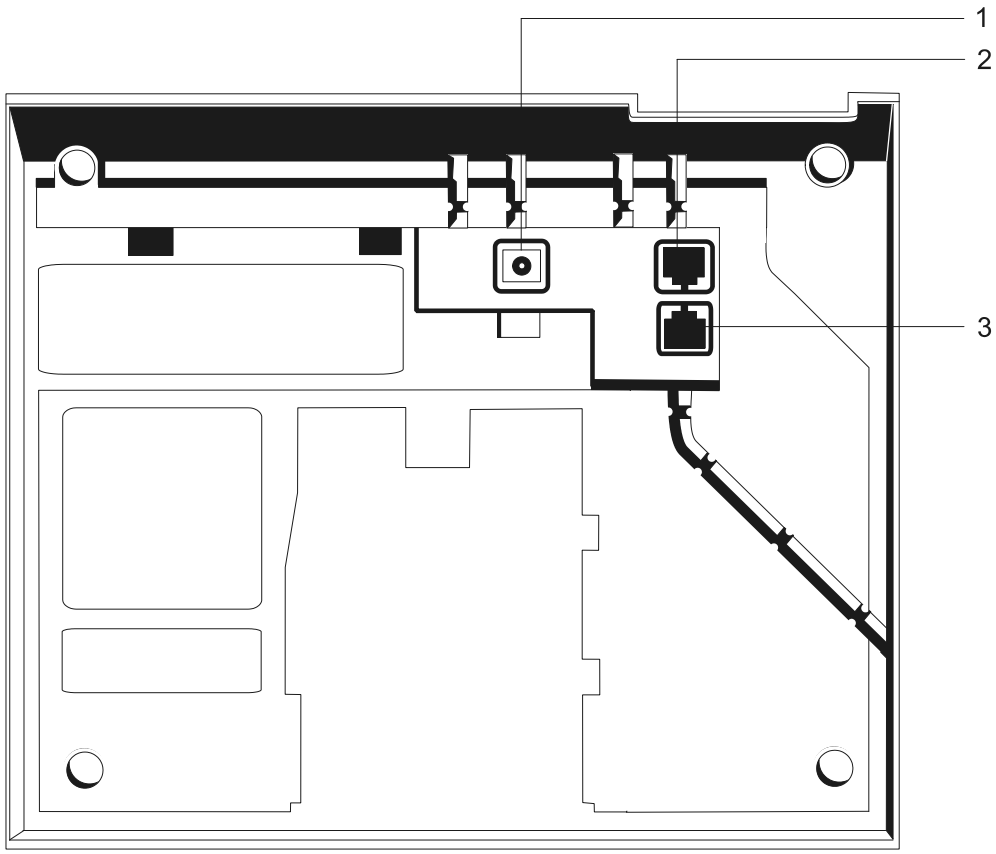
Please consult your IP specialist or your DSL provider in case you need any< additional information.

3 Connect the AC adapter with its small plug to the "POWER" jack and the AC adapter itself to a mains wall outlet.

4 In case you wish to use the headset (optional) just connect it to the corresponding connector of your telephone.



1. PC / LAN	Here you can connect your PC.
2. WAN	This is usually the connector to be used for telephony.



1. POWER	AC adapter jack
2. Headset	Connector for headset (optional)
2. Handset	Connector for handset coil cord

Explaining the steps of operation

Following please find some easy to understand examples on how to modify settings of your tiptel 83 VoIP.

In the following chapters of this User's Manual the programming and settings procedures will be shown as a menu path.

Example:

Advanced → Network → Static → IP

means that you will get to the menu item "IP" by pressing the key after which you browse with the keys and B to the desired menu item. In the sub menu "IP" you may then change the IP address of your tiptel 83 VoIP.

Settings by using a web browser will in general be depicted as follows:

WEB → VoIP Phone Menu → Function Key Setting

"WEB" stands for browser supported web configuration. After "WEB" you will then find the particular menu items to get to the desired setting. To connect to your telephone via web browser you need to enter the IP address of your tiptel 83 VoIP. Its IP address will be shown in the telephone's LCD when you press the key.

Factory default settings

As factory default the language of the telephone is set to German and the telephone acts as a DHCP client. In case your network has a DHCP server, your tiptel 83 VoIP will automatically be assigned with an IP address once you switch it on. SIP settings, however, will have to be performed manually.

Overview (selection):

language	German	
DHCP	On	
IP address at PC port	IP: Subnet mask:	192.168.10.1 255.255.255.0
User access data for web configuration	name: admin password: admin with restricted rights: Name: guest password: guest	
Access code for expert settings at telephone	123	

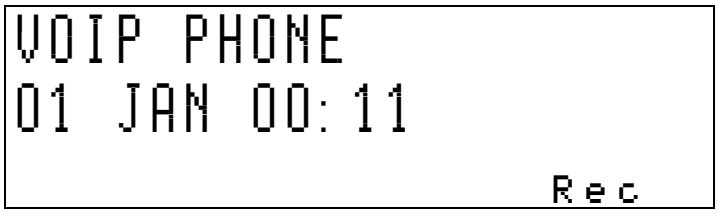
Language settings

Language Set

Language Set

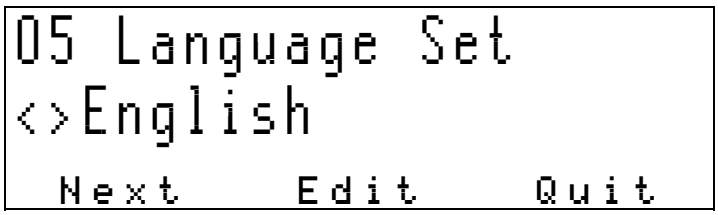
(WEB → VoIP Phone Menu → Language Setting)

All menu texts in this Manual are in English language. So, please programme the language settings to English first, in case your tiptel 83 VoIP had previously been set to another language.



Press menu key

Browse with cursor key to "Language Set"



Press "Edit"

Select "German" with cursor key

Press "Save" Saved

Network settings

Basic settings

As factory default tiptel 83 VoIP is set to DHCP client. In case your network does not have a DHCP server you will have to enter the IP address manually. An IP address is necessary for operation as well as for browser configuration. Please consult your network administrator in case of any questions concerning network settings, available IP addresses, ports, etc.

Checking the network status

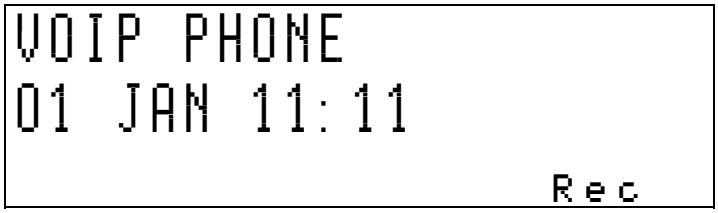
No network detected

In case tiptel 83 VoIP has not connected to any network the display will show:

In this case please check whether the network cable has been plugged in or if there is another problem regarding the cabling. Also check the configuration of the DHCP server.

Network detected

If a network has been detected you will see the following information on the display (example):

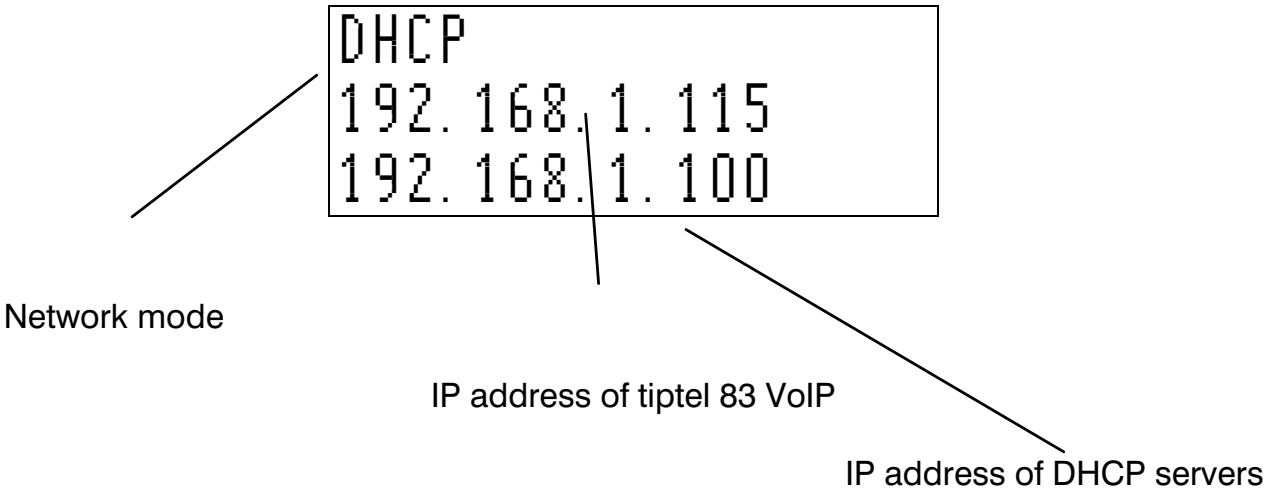


Operation with DHCP server

Check the network settings now.

Press network status key

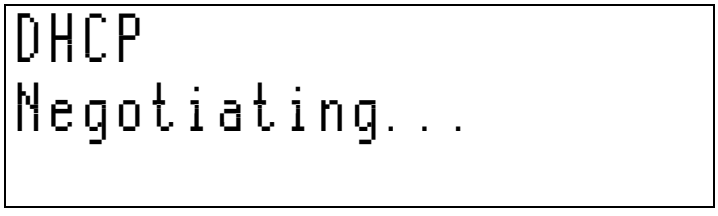
In case a DHCP server has been set up in your network and an IP address has been assigned to tiptel 83 VoIP you will see the following information in the display (example):



Please check whether tiptel 83 VoIP has been assigned with an IP address from the desired address range.

Operation without DHCP server

In case there is no DHCP server available or if there are other reason why the telephone has not been assigned with an IP address the following information is shown:



Entering the IP address

Advanced → Network → Static →IP

In this case you may enter the IP address manually.

Press menu key

With the cursor key browse to expert settings.

Press "Enter"

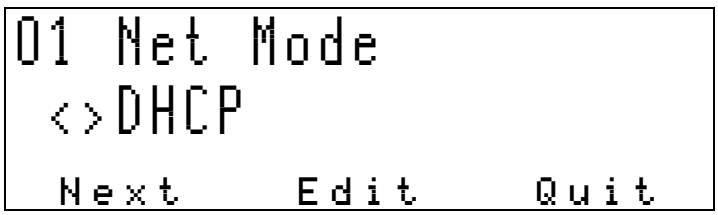
You will be asked for the password

Enter password
(factory default: 123)

Press "Enter"

With the cursor key browse to "Network"

Press "Enter"



B — Press "Edit"

With the cursor select "Fixed"

```
01 Net Mode
 <>Static
            Save    Quit
```

B — Press "Save" "Saved"

With the cursor key browse to "Static"

B — Press "Enter"

```
01 IP
192.168.1.179
  Next    Edit    Quit
```

B — Press "Edit"

```
New Parameter
192.168.1.179
  Del     Save    Quit
```

A — With the soft key "Del." delete the last character

0 ... 9 — With the number keys enter the IP address

The dots are being entered by using the asterisk key

With the soft key "Save" you can save the edited IP address

Saved!

Note:
Input data cannot be saved when there are invalid data or when the cursor is not positioned after the last digit

Entering the subnet mask

Advanced → Network → Static → Netmask

In case you have entered the IP address manually you will also have to enter the subnet mask manually.

If you enter the subnet mask right after entering the IP address you will just have to browse on to "02 Subnet Mask". Otherwise please start at the beginning.

Press menu key

With the cursor key browse to Expert Settings

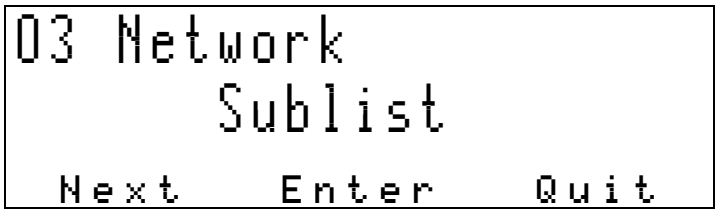
Press "Enter"

You will be asked for the password

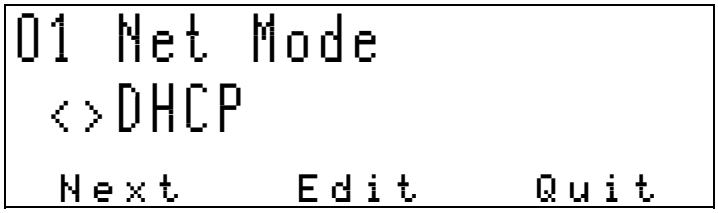
Enter password
(factory default: 123)

Press "Enter"

With the cursor key browse to Network

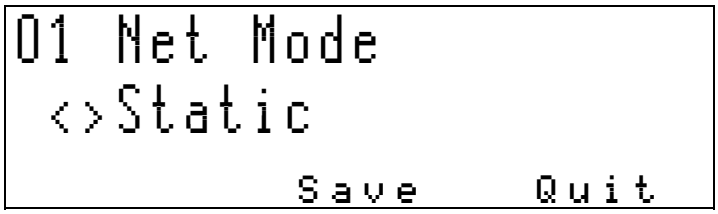


B Press "Enter"



B Press "Edit"

With the cursor key select "Static"

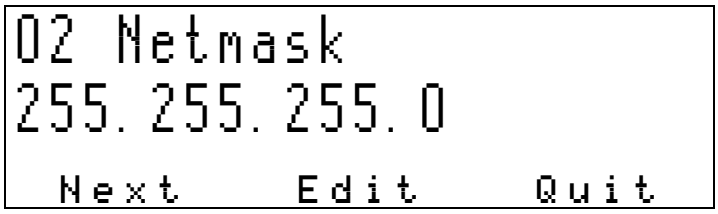


B Press "Save" "Saved"

With the cursor key browse to "Static"

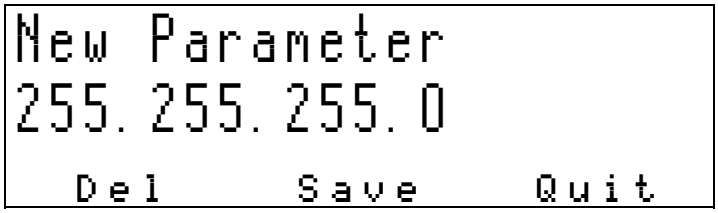
B Press "Enter"

With the cursor key browse to "Subnet Mask"



B

Press "Edit"



A

With the soft key "Del." you may delete the last character

0 ... 9

With the number keys you may enter the subnet mask

*

The dots are being entered by using the asterisk key

B

With the soft key "Save" you can save the subnet mask

Saved!

Note:
Input data cannot be saved when there are invalid data or when the cursor is not positioned after the last digit

Entering the gateway

Advanced → Network → Static → Gateway

Here you may enter the IP address of the gateway via which your network is connected to other networks (e.g. the internet). You need a gateway in order to be able to communicate with other SIP subscribers outside your own network.

Entering the DNS server

Advanced → Network → Static → DNS

Here you may enter the IP address of the DNS server.

Configuration using a browser

After verifying or entering the network settings you may configure your tiptel 83 VoIP using a browser. In order to be able to do so enter the IP address of your tiptel 83 VoIP into the address field of your browser and then simply follow the menu structure. In this web based configuration interface you will also find some settings which cannot be carried out at the telephone directly.

Programming a SIP account

Advanced → SIP Set. → {SIP1..SIP5}

You may programme up to 5 different SIP accounts. In order to be able to place or receive calls with your tiptel 83 VoIP you need to programme at least one SIP account. If you wish to use several SIP accounts for outgoing calls you have to programme the function keys as "Account Selection Keys" {*WEB → VoIP Phone Menu → Function Key Setting → Function Key Type*}. When using the telephone as a system telephone in general you should only programme one single SIP account.

Following settings may be carried out at tiptel 83 VoIP:

SIP{1..5} Name	enter a name at your choice which helps you to identify the SIP account easily while operating the telephone.
SIP{1..5} Server	here you should enter the IP address or the server's domain name providing the SIP service (when using as a system telephone: IP address of your Tiptel telephone system).
SIP{1..5} Phone no.	here you should enter the telephone number (ident number) assigned to you by your SIP provider (when using as a system telephone: The telephone number of the subscriber that has been set up in the Tiptel telephone system).
SIP{1..5} Account	here you should enter the account name assigned to you by your SIP provider (when using as a system telephone: The name of the subscriber that has been set up in the Tiptel telephone system). In case you encounter any problems when registering please use the same entry for telephone number and account.
SIP{1..5} Password.....	here you should enter the assigned to you by your SIP provider (when using as a system telephone: The password of the subscriber that has been set up in the Tiptel telephone system).
SIP{1..5} Registration .	here you can programme whether or not the SIP account shall be used.

In some cases, especially when using tiptel 83 VoIP as a system telephone the server port 5060 will have to be edited depending on the settings in your tiptel.com telephone system.

WEB → VoIP Phone Menu → SIP Setting → Basic Set → Server Port

Assistant, configuration wizard

WEB → VoIP Phone Menu → Wizard

A configuration assistant will guide you through the most essential settings when setting up your tiptel 83 VoIP.

Application notes

Application notes and notes on the configuration you will find on the homepage of tiptel.com GmbH at http://www.tiptel.com.

Operation as a system telephone with tiptel.com 410-811

If you wish to operate tiptel 83 VoIP as a system telephone at a tiptel.com 410-811 telephone system, both devices should be part of the same network. tiptel.com 410-811 must be programmed as SIP proxy. Please refer to the tiptel.com 410- 811 User's Manual.

Then proceed as follows:

1. In tiptel.com 410-811 programme a subscriber as SIP subscriber by proceeding to the subscriber's administrator settings and selecting under "Assignment of extensions" the port as "SIP Proxy Port". Phone number and password of the subscriber are the access data for your tiptel 83 VoIP.

   Under the subscriber's telephone number there may only be one tiptel 83 VoIP subscribed to the telephone system.

   Und system telephone please select as type "83 VoIP".

2. Now programme the network data at tiptel 83 VoIP:

   Advanced → Network → Static → IP
   An unused IP address from your network

Advanced → Network → Static →Netmask
Subnet mask of your network

Advanced → Network → Static →Gateway
Gateway of your network

Advanced → Network → Static →DNS
IP address of your DNS server

3. Programming SIP user agent

   To male sure that tiptel 83 VoIP will be detected as system telephone by the telephone system you need to carry out the following setting:

   WEB → VoIP Phone Menu → SIP Setting→ Advanced Setting → SIP-Advanced Setting → SIP-User Agent

   Here you should enter "**tiptel 83VoIP**".

4. Programming function keys
   WEB → VoIP Phone Menu → Function Key Setting → Function Key Type: Command Button

   The setting "Command Button" applies to all function keys. In this setting the function keys will be programmed by the telephone system.

5. Programme DTMF dialling
   WEB → VoIP Phone Menu → SIP Setting→ Advanced Set → DTMF Mode

   Here you should programme "DTMF_RELAY" in order to be able to remotely query e.g. your voice box.

When operating tiptel 83 VoIP as a system telephone nearly all function known from an ISDN telephone are at your disposal. Operation, however, is different in some points.

Your system telephone does not support any acoustic acknowledge signals. After keypad programming (e.g. deflection with #21#) you will hear a busy signal. Acknowledgement is being given by a call back.

Following system functions are not supported by your tiptel 83 VoIP:

- External line access status
- External line with predefined MSN
- B channel indication
- Call monitoring (tiptel 83 VoIP has its own monitoring function)

Since many keypad functions are being concluded by pressing the # key and at the same time this is the key that is being used in all VoIP telephones to signal the end of the dialling sequence, keypad functions can only be carried out while being dialled before picking up the handset as a single sequence.

First you will have to enter the desired sequence (e.g. *21*32# for "Unconditional Call Forwarding " to extension 32) and then press the loudspeaker key or pick up the handset.

As an alternative you may also deactivate the option of concluding your dialling sequence by pressing the # key as follows:

WEB → VoIP Phone Menu → Advanced Setting → Digital Map → End With "#"

In this case you can no longer conclude a dialled number by pressing the # key. the dialled number will then only be dialled once the programmed waiting time is over.

Some keypad functions generally do not work with your tiptel 83 VoIP such as:

- Select outgoing extension
- Listening to music on hold as a sample

Configuration

Configuration of tiptel 83 VoIP can either be carried out at the telephone or via a web browser. The scope of configuration is larger with the web configuration.

☞ Some changes - especially with the network settings- will only be applied after re-starting the telephone.

General telephone settings

Display settings

Screen Set → Contrast

Programme the contrast with the cursor keys left/right for optimum readability.

Screen Set → Backlight

Please select whether you wish to have the display being automatically backlit or whether backlight shall be switched off all the time.

Ringing signal

Ringer Set → Ringer Volume

(WEB → VoIP Phone Menu → Phone Setting → DSP Config → Ring Volume)

Adjust the volume with the cursor keys left/right.

☞ When your telephone rings you may also adjust the volume with the and keys.

Ringer Set → Ringer Type

(WEB → VoIP Phone Menu → Phone Setting → DSP Config → Ring Type)

Choose a ringing melody with the cursor keys left/right.

Handset and hands free volume

Audio Set. → Voice Volume

(WEB → VoIP Phone Menu → Phone Setting → DSP Config → Output Volume)

Adjust the handset volume with the cursor keys left/right.

☞ When the handset has been picked may also adjust the volume with the ◿+ and ◿− keys.

(WEB → VoIP Phone Menu → Phone Setting → DSP Config → Hands Free Volume)

☞ In hands free operation you can adjust the loudspeaker volume with the ◿+ and ◿− keys.

Audio Set. → Mic Volume

(WEB → VoIP Phone Menu → Phone Setting → DSP Config → Input Volume)

You can adjust the microphone gain of the handset or the hands free microphone with the cursor keys left/right. However, it is recommended to leave this setting at "5".

Greeting word

Greeting Word

Here you can enter a name that will be shown on the display in stand by.

☞ This setting cannot be performed via web configuration.

Language

Language Set (English)

Here you can select the language of your tiptel 83 VoIP (English, German, French, Dutch).

Date and time

WEB → VoIP Phone Menu → Phone Setting → Time Config

Date and time will be automatically set via SNTP. Please enter the IP address of the SNTP server and the time zone.

Server.....	Enter the IP address of the time server
Time zone	Select your time zone
Interval	Query interval for SNTP server
SNTP.....	On/Off
Daylight saving time	Must be set manually during the daylight saving time period

You may also set date and time manually:

Year.....	YYYY
Month	MM
Day	DD
Hour	HH
Minute	mm

Call forwarding

Call Service → Call Forward → {SIP1..SIP5}

Select the desired call deflection mode.

Mode..... The following options are available:

- **Off**: Deactivated
- **Unconditional:** All incoming calls for this SIP account will be forwarded

- **Busy:** Incoming calls for this SIP account will be forwarded only when you are busy
- **No reply:** Incoming calls for this SIP account will be forwarded after 20 seconds of no reply

Number ..... Please enter the target number for call forwarding.

☞ tiptel 83 VoIP will perform the call forwarding itself. So, the telephone system tiptel.com will not indicate this programming. Call forwardings that were programmed via keypad or the system keys, however, will be indicated and performed by the telephone system.

Automatic call accepting

WEB → VoIP Phone Menu → Phone Setting → Call Service

Your tiptel 83 VoIP can take calls automatically after a programmable delay time. In order to do so hands free mode will be activated.

Accept automatically ..... On/off

Delay (sec.) ..... Delay before taking the call in seconds

☞ This delay time will also apply to the answering machine and to call forwarding

Programming the function keys

WEB → VoIP Phone Menu → Function Key Setting → Function Key Type

Your tiptel 83 VoIP provides you with function keys that can be programmed individually. The operation mode can be set to three different modes with the programmed mode applied to all function keys:

Memory key ..... All function keys can be programmed as speed dial keys and assigned with a telephone number each

Enter the telephone number under "Memory Key Setting".

Account selection key The function keys are being used to select the SIP account over which you want to place an outgoing call.

Command key ..... When using the telephone as a system telephone the function keys will be programmed by the tiptel.com telephone system.

When using your tiptel 83 VoIP as a system telephone at a tiptel.com telephone system you should programme the function key mode to "command key" in order to enable the telephone system to programme those keys.

General SIP settings

WEB → VoIP Phone Menu → Phone Setting → DSP Config

For voice quality and bandwidth (data volume) optimization you can modify the following settings:

Codecs..... Preferred codec for voice calls. The codec will be negotiated at the start of each connection set-up. This means that also codecs different from the ones you programmed can be used. This happens when the other party's telephone does not support the codec you programmed.

- G.711 — Voice quality similar to ISDN, highest bandwidth

  A-law: Flavour mainly used in Europe

  μ-law: Flavour mainly used in North America and Japan

- G.723 — Slightly Reduced voice quality with less bandwidth

  r63 – 6.3 kbps (+ overhead!)
  r53 – 5.3 kbps (+ overhead!)

- G.729 — Good voice quality with less bandwidth

G.729 Packet size ..... The smaller the size the smaller the delay times and the lower the gaps during packet loss. With bigger packets, however, the protocol overhead will be reduced resulting in much lower bandwidth need in particular with codecs different from G.711.

Signal standard ..... Set the signal standard of your country.

Hand down Time ..... Time need to detect that the handset has been put on hook.

VAD ..... With activated VAD (Voice activity detection) during times without any voice activity the data volume will be drastically reduced. When using the telephone as a system telephone this option will have to be deactivated.

Miscellaneous settings

WEB → VoIP Phone Menu → Phone Setting → Call Service

Enable Call Transfer ..... Allows you to transfer a call without prior notification

Enable Three Way Call ..... Allows you to set up a telephone conference

Dialling assistance

Your tiptel 83 VoIP provides you with some useful settings which you can use with outgoing calls.

Baby call, hotline

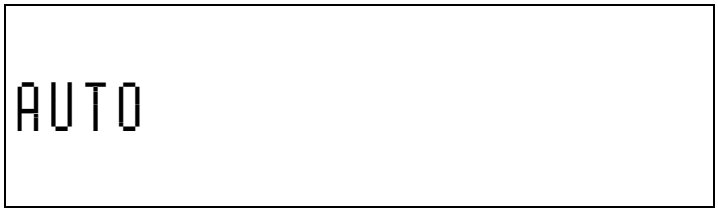
WEB → VoIP Phone Menu → Phone Setting → Call Service → Hotline

The telephone number entered in the "Hotline" box will be dialled immediately upon picking up the handset or pressing the hands free key. You can also define the SIP account over which the number shall be dialled, e.g. 123@1.

Pick up handset

or

Press "Loudspeaker" key



To deactivate "Baby Call" you will simply have to delete the telephone number.

☞ With "Baby Call" activated you cannot dial numbers form the telephone book.

Digital Map

WEB → VoIP Phone Menu → Advanced Setting → Digital Map

You can carry out certain settings which helps you making the day by day use of your tiptel 83 VoIP even easier. Since with SIP telephony there is no public switchboard as we know it also the dialling procedure is different from analogue or ISDN telephones.

Generally a telephone number or a target address must be sent as on e single string. So tiptel 83 VoIP first saves all entered digits and then sends them as a single string to the SIP proxy. In order to enable tiptel 83 VoIP to detect when a number has been dialled completely there are different procedures available:

End with # ..... Activate this option in case you wish to conclude the telephone number to be dialled with the # key.

Note: Many programming and system functions of your tiptel.com telephone system can then only be programmed by sending the sequence as a single string.

Fixed length ..... The number will be dialled once the number of digits reaches or matches the number of digits programmed here.

Time out ..... The number will be dialled when there has been no further input for the number of seconds programmed here.

Rules

WEB → VoIP Phone Menu → Advanced Setting → Digital Map → Rules

by defining rules you can generate the dialling conclusion automatically. This means if a number matches a rule it will be automatically dialled immediately or - if a delay time was programmed - after the time out. Rules may also be combined with "Dial Peer". Here. first the rule the rule detects the end of the telephone number while "Dial Peer" then converts the telephone number.

Rules can be only one single telephone number or they can comprise wildcards or control sequences. Following settings are available:

1234567890 ..... Once a telephone number matches the programmed sequence of digits (in this case "1234567890") this number will be dialled.

[1,2,3] or [123] ..... Digits can (as part of a telephone number) comprise those digits shown in parenthesis.

[1-3] ..... Digits can (as part of a telephone number) comprise the range of digits shown in parenthesis.

x ..... Any digit

Tn ..... Dialling out does not start immediately but after a delay determined as Tn (n = seconds from 1 . . . 9)

.Tn ..... A full stop in front of Tn stands for any digit and length.

Time Out ..... The telephone number will be dialled after the last digit has been entered and the "Time Out" has run out.

A "Time Out" can e.g. be programmed to makes sure that also longer numbers than defined in the rules can be dialled.

Examples for rules:

112 ..... 112 will be dialled immediately.

[1,2,3] x x x ..... Any 4 digit number starting with 1, 2, or 3 will be dialled immediately.

x x x T 5 ..... Any 3 digit number will be dialled 5 seconds after the third digit has been dialled. In case someone dials one or more additional digits within 5 seconds after the third digit the rule will be overruled. Then you can also dial numbers with more than 3 digits.

Dial peer, editing a dialled number, speed dial

WEB → VoIP Phone Menu → Phone Setting → Dial Peer

With the help of rules for dial peers you may edit dialled telephone numbers. With the help of this modifications you can defer outgoing calls or set up e.g. a P2P connection without the need of a SIP proxy. This way you can also set up a speed dial register.

Phone number ..... Enter the complete telephone number to be modified or just enter the first part of the number followed by a "T".

123456	Modifications apply to 123456
12T	Modifications apply to all telephone numbers starting with 12.

Destination ..... The number to be dialled will be sent to the IP address entered here (optional).

Enter 0.0.0.1 for SIP account 1, 0.0.0.2 for SIP account 2 and so forth.

Port..... Port of the target address to which tiptel 83 VoIP shall connect (optional). With SIP usually 5060.

Alteration ..... Following modifications can be carried out (optional):

add:123	The entered digits will be added to the telephone number as a prefix (here: 123)
all:123456	the complete telephone number will be replaced with the entered digits (here: 123456)
rep:123	Works only with "Delete length". The number of digits defined under "Delete length" will be deleted. The digits entered will put in front of the remaining telephone number as a prefix.

Suffix ..... Digits entered here will be added to the telephone number at the end (optional)

Delete Length ..... Number of leading digits to be removed.

Select SIP account automatically

You can set up telephone numbers and define if SIP account 1 or 2 shall be used. In order to do so under "Dial Peer" define a rule with the desired telephone number and the target address according to the table below:

Target address	SIP account
0.0.0.1	1
0.0.0.2	2
...	
0.0.0.5	5

Dial locks

Your tiptel 83 VoIP provides you with the option to set up different dial locks.

Block outgoing calls, external line access

WEB → VoIP Phone Menu → Phone Setting → Call Service → Call Service Setting → Ban Outgoing

Without external line access no outgoing call can be made. Also numbers from the telephone book cannot be dialled. Only baby call is still working.

Black list

WEB → VoIP Phone Menu → Phone Setting → Call Service → Black List

Under "Black List" please enter those numbers that shall not be dialled. You can also exclude ranges of telephone numbers from dialling by just entering the first digits of a telephone number. Black listed numbers will also block dialling matching numbers from the telephone book.

Blocking incoming calls from certain numbers

Your tiptel 83 VoIP provides you with the option to forbid taking calls from particular telephone numbers.

Call waiting

WEB → VoIP Phone Menu → Phone Setting → Call Service → Enable Call Waiting

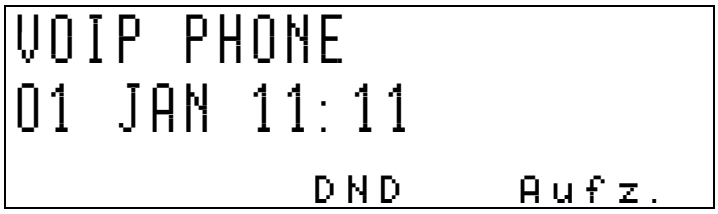
If you have a telephone call and another caller shall get a busy signal while you are busy then you should deactivate this option.

Do not disturb

Call Service → No disturb
WEB → VoIP Phone Menu → Phone Setting → Call Service → No Disturb

With "No Disturb" ("DND" = do not disturb) tiptel 83 VoIP will not take any calls. Callers will hear a busy signal or a message - depending on your provider. Outgoing calls, however, can be placed.

With activated "No Disturb" you will see "DND" in the telephone's display.



☞ In stand by you can activate/deactivate DND by pressing the B key.

☞ An unconditional call deflection will also be carried out with DND activated.

Call Filter

WEB → VoIP Phone Menu → Phone Setting → Call Service → Limit List

In the "Limit List" of your tiptel 83 VoIP you can enter telephone numbers that should always receive a busy signal when calling you.

☞ You can also enter alphanumeric strings. A selection of SIP accounts, however, (e.g. 123@1)is not possible.

Limiting calls by comparing telephone numbers

WEB → VoIP Phone Menu → Phone Setting → Call Service → Accept Any Call

Generally your tiptel 83 VoIP will take any call regardless of the SIP account (Accept Any Call).
Otherwise only those calls will be signalled with which the telephone number (SIP INVITE) matches the corresponding number of the SIP account.

Users and passwords

Access to the Advanced Settings at your tiptel 83 VoIP same as to the web interface is protected by a PIN code respectively a user name and a password.

Changing the keypad password

Advanced → Set Password

WEB → VoIP Phone Menu → Phone Setting → Account Config → Keyboard Password

Here you can change the keyboard password. You need a keyboard password to get to the level "Advanced Setting" when configuring your tiptel 83 VoIP.

The factory default keyboard password is 123.

In case you forgot your keyboard password you can enter a new one in the web configuration.

Access to web configuration

Account configuration

WEB → VoIP Phone Menu → Phone Setting → Account Config

You can set up different users with different access right for web configuration. There can be as may as 5 users.

Name	Any name without special characters or blanks "admin" is a predefined name which cannot be used here.
Password	Any string with alphanumeric characters without special characters or blanks
User Level	"Root" has full access o web configuration. "Guest" has limited access to that configuration.

☞ User "admin" cannot be deleted.

☞

MMI-Filter

WEB → VoIP Phone Menu → Advanced Setting → MMI-Filter

By using the MMI filter you can extend the already existing password protection by limiting access to a certain IP address or an address range. Then you can only access web configuration from a PC with that particular IP address or from that particular IP address range.

Network Setting

Your tiptel 83 VoIP provides you with one WAN and one LAN interface. For telephony you have to set up the WAN interface. The LAN interface can be used for connecting a PC in case tiptel 83 VoIP is directly connected to a DSL modem or in case there is only one network jack at your desk.

WAN-Connect mode

Advanced → Network → Network Mode

WEB → VoIP Phone Menu → Network Setting → WAN Config

In order to allow you to make telephone calls with your tiptel 83 VoIP or to use the web based configuration some network settings have to be carried out with your telephone to integrate it into your existing network.

You can select between a static IP address, DHCP, and PPPoE.

Static IP address.....	Programme the necessary network data yourself.
DHCP	Network data will be provided and assigned to the telephone by a DHCP server or e.g. by your tiptel.com 410...811.
PPPoE.....	tiptel 83 VoIP has direct access to the internet. Enter the access data of your internet service provider (ISP).

PPPoE settings

Advanced → Network → PPPoE Set.

WEB → VoIP Phone Menu → Network Setting → WAN Config → WAN Setting

Enter your access data of your internet service provider (ISP).

PPPOE-Server	Enter the IP address you received from your internet service provider.

Enter "ANY" in case you did not receive any IP address.

User name ..... Enter the user name you received from your internet service provider.

Password ..... Enter the password you received from your internet service provider.

☞ In PPPoE mode manually performed settings for the WAN port are still valid. In case you want to enter network data for the LAN port (PC) in the web configuration then you will have to select another network there.

WAN settings Static network

Advanced → Network → Static

WEB → VoIP Phone Menu → Network Setting → WAN Config → WAN Setting

Enter all necessary network data.

IP address..... Enter the IP address defined by you.

Netmask..... Enter the applicable subnet mask.

Gateway..... Enter the IP address of the gateway which connects you to the outside world. You need a gateway in case you wish to place telephone calls to SIP subscribers outside your own network.

DNS Domain..... Enter the DNS domain here or leave the box empty.

Primary DNS ..... Enter the IP address of the DNS server here.

Alter DNS ..... Enter the alternative IP address of the second DNS server here.

LAN settings

WEB → VoIP Phone Menu → Network Setting → LAN Config → LAN Setting

Enter all necessary network data. In case you are using the LAN port you will probably want to programme the bridge mode. In bridge mode both network ports

are switched same as a hub. This way you can e.g. connect a PC to the LAN port of your tiptel 83 VoIP which is located in the same network.

LAN-IP ..... Enter an IP address defined by you. You need to programme another address range as at the WAN port.

☞ In bridge mode this IP address has no effect.

Netmask..... Enter the applicable subnet mask.

DHCP Service ..... Activate DHCP service in case your tiptel 83 VoIP should act as a DHCP server at the LAN port.

☞ In bridge mode this IP setting has no effect.

NAT ..... Activate NAT in case your tiptel 83 VoIP does not work in bridge mode and you wish to use it a gateway. In case you deactivate NAT and bridge mode at the same time then WAN and LAN port will create two different networks.

In case you wish to use your tiptel 83 VoIP in your PC as gateway then you will have to enter the LAN IP of your tiptel 83 VoIP as gateway address in your PC.

With NAT activated your tiptel 83 VoIP may no longer be accessible via the WAN port. In this case please use the LAN port.

Bridge mode ..... Activate the bridge mode to have both ports of your tiptel 83 VoIP behave like a hub. In this case your tiptel 83 VoIP can also be accessed through the LAN port via the IP address set under WAN settings. Deactivate the bridge mode in case you are operating different networks at WAN and LAN port. In this case tiptel 83 VoIP can be accessed through the LAN port via the IP address set under LAN settings.

☞ When you activate/deactivate the bridge mode your tiptel 83 VoIP will perform a restart without notification.

DHCP settings

WEB → VoIP Phone Menu → Network Setting → DHCP

In case you wish your tiptel 83 VoIP to represent a DHSP server at its LAN port then you will have to enter the necessary data here. You can enter more than just one table. When the DHCP server of your telephone has been activated network devices (DHSP clients) will automatically be assigned with a dynamic IP address unless they have not been set to a static IP address. In the dynamic IP address range there may be no static IP address of a network device.

Lease table name	Name of the data set
Start IP	First dynamic IP address that can be assigned by the DHCP server
End IP	Last dynamic IP address that can be assigned by the DHCP server You should usually select a dynamic IP address range in that network in which the LAN port of your tiptel 83 VoIP is located.
Lease Time	Lease time in minutes. The lease time defines how long an IP address assigned by a DHSP server is valid.
Netmask.....	The subnet mask must match the IP address range set and will be transmitted to the client during a DHSP request. You should usually select a the subnet mask which you set under LAN settings.
Gateway.....	IP address of the gateway which shall be transferred to the DHCP client. This is usually the LAN IP address of your tiptel 83 VoIP.
DNS.....	IP address of the DNS server which shall be transferred to the DHCP client.
DNS-Relay	With activated DNS relay your tiptel 83 VoIP serves to the WAN side as DNS client and to the LAN side as DNS server. This means DNS queries from the LAN side will be transferred to the DNS server in the WAN.

Port configuration

WEB → VoIP Phone Menu → Network Setting → Net Service

Set those ports under which the individual service can be accessed.

HTTP Port ..... Via this port the web configuration of your tiptel 83 VoIP can be accessed. If you enter another port you will have to type this in the address bar of your browser - with e.g. port 100 this would look like 192.168.10.1 : 100.

Note: These changes will only be applied after a re-start of your tiptel 83 VoIP.
If you enter "0" your tiptel 83 VoIP cannot be configured by using a web browser.

Telnet Port..... Via this port the telnet service of your tiptel 83 VoIP can be accessed.

Special settings when operating as gateway

If you do not operate the LAN port in bridge mode there are some more settings options.

NAT – Network address translation

WEB → VoIP Phone Menu → Network Setting → NAT

When you operate your tiptel 83 VoIP as gateway then you can use the NAT settings to optimize the functions of your network.

WEB → VoIP Phone Menu → Network Setting → NAT Setting → Protocol Set

IPSec ALG..... NAT also applies to IPSec protocol

FTP ALG..... NAT also applies to FTP protocol

PPTP ALG ..... NAT also applies to PPTP protocol

Port forwarding always applies to a protocol.

WEB → VoIP Phone Menu → Network Setting → NAT Setting → NAT Table

Protocol..... Select whether the table entry you performed shall apply to UDP or TCP.

Outside Port..... Port number at WAN Port which shall be mirrored to the inside IP

Inside IP ..... IP address of the network device at LAN Port

Inside Port..... Port number at LAN Port incoming packets shall be mirrored to

To delete a NAT table entry enter all data manually and then click on "Delete".

DMZ – Demilitarized Zone

WEB → VoIP Phone Menu → Network Setting → NAT → DMZ Config

For establishing a DMZ you may forward all incoming connections for a particular IP address to any specific IP address at the LAN port.

Outside IP ..... Incoming IP address at WAN port

In case you set up the WAN IP address of your tiptel 83 VoIP as "Outside IP" then you can no longer configure your tiptel 83 VoIP from the outside!

Inside IP ..... Target IP address LAN port

SIP Setting

You can programme up to 5 SIP accounts with your tiptel 83 VoIP. When operating the telephone as system telephone, however, we recommend using only one single SIP account.

SIP account basic settings

Advanced → SIP Set. → {SIP1..SIP5}

WEB → VoIP Phone Menu → SIP Setting → Basic Set

You may programme up to 5 different SIP accounts. In order to be able to place or receive calls with your tiptel 83 VoIP you need to programme at least one SIP account. If you wish to use several SIP accounts for outgoing calls you have to programme the function keys as "Account Selection Keys" {*WEB → VoIP Phone Menu → Function Key Setting → Function Key Type*}. When using the telephone as a system telephone in general you should only programme one single SIP account.

To set up a SIP account you will have to perform the following settings:

SIP{1..5} Name ..... Server name	enter a name at your choice which helps you to identify the SIP account easily while operating the telephone.
SIP{1..5} Server ..... Server address (Registrar)	here you should enter the IP address or the server's domain name providing the SIP service (when using as a system telephone: IP address of your Tiptel telephone system).
Server port (Registrar)	here you should enter the port under which the SIP server can be reached
SIP{1..5} Phone number..... Phone number	here you should enter the telephone number (ident number) assigned to you by your SIP provider (when using as a system telephone: The telephone number of the subscriber that has been set up in the Tiptel telephone system).

SIP{1..5} Account ..... Account name	here you should enter the account name assigned to you by your SIP provider (when using as a system telephone: The name of the subscriber that has been set up in the Tiptel telephone system). In case you encounter any problems when registering please use the same entry for telephone number and account.
SIP{1..5} Password..... Password	here you should enter the assigned to you by your SIP provider (when using as a system telephone: The password of the subscriber that has been set up in the Tiptel telephone system).
SIP{1..5} Registration .. Account active	here you can programme whether or not the SIP account shall be used.

Following settings are only needed in special:

Display Name	Enter a name that shall be transferred to the called party with outgoing calls (CNIP)
Proxy Server Address	In case your SIP provider operates separate servers for registration and SIP proxy the you will have to enter here the IP address or the domain name of the proxy server.
Proxy Server Port	Here you should enter the port via which the SIP server can be accessed.
Proxy Username	Here you should enter the account name assigned to you by your SIP provider.
Proxy Password	Here you should enter the password assigned to you by your SIP provider.
Domain Realm	Here you should enter the SIP Domain name. In case you do not enter any realm either the server addresses from registrar or from proxy will be used. In most cases you do not need to perform any entry here.

☞ When operating the telephone as a system telephone at a tiptel.com telephone system following settings will have to be carried out:

- Server / server address
- Server port
- Phone number
- Password
- Registration / account active

These settings will have to match the settings in your tiptel.com telephone system. The numbers for every SIP telephone will have to be unique.

☞ When logging in to an asterisk server the following settings will have to be carried out:

- Server / server address
- Server port
- Account name
- Phone number
- Password
- Registration / account active

In this case account name and telephone number will have to match.

SIP account advanced setting

WEB → VoIP Phone Menu → SIP Setting → Advanced Setting

Following settings can be carried out:

Register Expire Time ...	tiptel 83 VoIP will renew its registration with the SIP proxy after the time interval set
Detect Interval Time.....	Time interval for automatic server detection - see "Automatic server detection" (Time interval for server detection)
User Agent.....	Here you should enter the name you received from your SIP provider or leave the field empty. When operating at a tiptel.com telephone system, please enter "tiptel 83voip".
Signal Key.....	With the signal key data transfer to the SIP server can be encrypted. Leave the field empty in case you do not have a signal key.

Media Key (RTP) ..... With the media key voice transfer can be encrypted (RTP) Leave the field empty in case you do not have a media key.

Server Type..... Select "common", in case your SIP provider is not listed here.

see also "Automatic server detection"

DTMF Mode ..... Determines the mode used to transfer digits while having a connection

Select "DTMF Relay" (inband audio) in order to be able to use system functionality at a tiptel.com telephone system.

Select "DTMF RFC2833" or "DTMF SIP INFO" depending on your application.

RFC Protocol Edition ... Today's standard is RFC3261. Select RFC2543 in case you wish to connect to a SIP telephone with standard SIP 1.0.

Forward Type..... Chose between "off", "always, "busy", and "no answer". Incoming calls will the be forwarded to the following telephone number depending on the setting chosen.

When selecting "no answer" the delay time programmed under "*Call Service*" (see page 36) applies.

Forward Phone Number For call forwarding. Enter the target number in the same way as if you would enter it for an outgoing call.

Call forwarding will be carried out via the same SIP account. It is not possible to use another SIP account for call forwarding.

Subscribe..... Timeout / Expires - value for subscribe, see "Activate Subscribe"
Expire Time

Enable PRACK ..... Activates provisional acknowledge.

Enable Keep Authentication	Causes your tiptel 83 VoIP to use the last received key when registering again. This may help to accelerate registration.
Auto Detect Server	With this option activated tiptel 83 checks in time intervals set as "Detection Time" if the SIP server programmed can be accessed. In case that server cannot be accessed then another SIP account will be used for outgoing calls.
Enable Session Timer ..	When activated there will be a "Re-Invite" during a call.
Signal Encode	Activates signal encoding to your SIP provider
RTP Encode.....	Activates encryption of audio data (RTP)
Use STUN	Activate STUN to be able to place calls via the NAT of a firewall. Deactivate STUN in case the STUN server is located in the same network.
Enable Via rport.....	In case you encounter problems in connection with NAT of a firewall then should activate rport. In this case tiptel 83 VoIP will send port information to your SIP provider.
Answer With Single Codec	Causes your tiptel 83 VoIP to send only one single codec during connection set up.
Enable Subscribe	In case your SIP provider supports SIP Presence Function then you can activate this service.

SIP STUN settings

WEB → VoIP Phone Menu → SIP Setting → Global Set

In case you wish to place telephone calls via a gateway the it is in most cases necessary to determine the IP address of your internet access by using a STUN server. STUN servers are usually provided by your SIP provider.

STUN Server ..... Enter the IP address or the domain name of the STUN server.

STUN Port ..... Enter the port of the STUN server.

STUN Interval ..... Enter the time interval for queries to be sent to the STUN server.

Miscellaneous SIP settings

WEB → VoIP Phone Menu → SIP Setting → Global Set

Local SIP Port ..... SIP port of tiptel 83 VoIP

SIP Domain ..... Please leave this field empty. It has been reserved for future applications.

QoS

WEB → VoIP Phone Menu → Network Setting → QOS

For optimization of voice packet transfer on the net you can perform a number of settings. Please note that the effect of these settings may be subject to limitations caused by the existing infrastructure. Following settings are available:

VLAN ..... Virtual Local Area Network

Within a physical network you can set up a virtual network by using an ID. Please consult your network administrator.

DiffServ..... Differentiated Services

With this service activated voice packets will be assigned with a certain priority. High values represent a higher priority then lower values. 0xb8 has the highest priority.

Following values are possible:

0x 28, 30, 38, 48, 50, 58, 68 , 70, 78, 88, 90, 98, b8.

RTP ports

WEB → VoIP Phone Menu → Network Setting → Net Service

RTP ports (Real Time Transport Protocol) are being used to transfer audio data over the network. RTP ports must be assigned individually when using more than one SIP telephone in order to enable communication via a gateway. In the gateway itself you will have to programme port forwarding for the corresponding port range. You will generally need at least to RTP orts per SIP telephone.

RTP Initial Port ..... Here you should enter from which port address on the range shall be used for your tiptel 83 VoIP. You will have to enter an even port number.

RTP Port Quantity ..... Here you should enter the number of RTP ports needed. When programming port forwarding please note that RTP ports always are even port numbers

and so, the last reserved port will be calculated as follows:

"RTP port to" = "RTP port from" + (("RTP port numberl"-1) * 2)

Example:
RTP initial port (from) = 5008
RTP port number = 10
In a router which is present in your network you will have to programme port forwarding from port 5008 to port 5026.

Update and back up

Restore factory default settings

You can reset your tiptel 83 VoIP by using the web interface as follows:

WEB → VoIP Phone Menu → System Manage → Factory Reset

Restore factory default (lost password)

In case you lost or forgot your password for web configuration you can restore factory default as follows:

Remove the AC adapter or the network cable (in case you are using PoE) and plug it back in again while holding down the # key.

Now on your Windows PC open the command prompt window and enter:

telnet 192.168.10.1

☞ Please make sure that your Windows PC is in the same network as this IP address (192.168.10.xxx). Access is made via the WAN port.

Now you will see a menu in which you can reset the configuration.

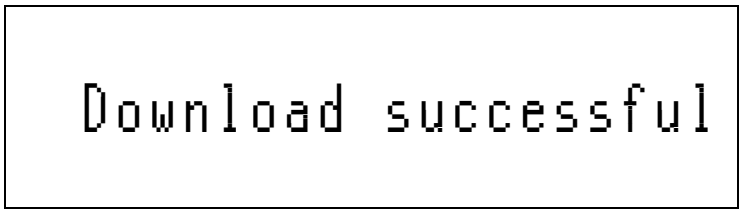
Firmware update

WEB → VoIP Phone Menu → System Manage

Here you can upload the latest firmware to your tiptel 83 VoIP. The latest firmware is available on the website of tiptel.com GmbH www.tipel.com.

Select the file (firmware) and then click on "Update". The display of your tiptel 83 VoIP will show:

and then



and finally

After your tiptel 83 VoIP has performed a re-start you will have to re-log in again.

☞ Do not - under no circumstances - interrupt the firmware update.

Latest firmware version

WEB → VoIP Phone Menu → Running Status

The current version number of the firmware will be displayed right after "Version". You will need this number e.g. when contacting our technical support.

Back up Configuration

WEB → VoIP Phone Menu → System Manage → Backup Config

Her you can save the settings of your tiptel 83 VoIP permanently as a text file to your PC.

A saved configuration can be uploaded to your tiptel 83 VoIP again via "HTTP-Update".

Telephone functions / using the telephone

Place a call

After having installed your tiptel 83 VoIP properly you can place your first telephone call.

During the call you will see a call timer showing you the time since you started occupying line. So, you can always see the current call time used so far.

☞ Due to technical reasons you will hear no external office tone with external calls.

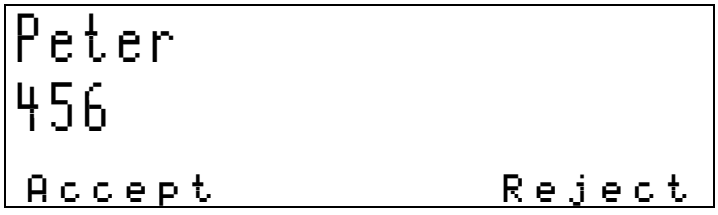
☞ It is not possible to have special dialling tones as you can have them with a conventional system telephone at a tiptel.com telephone system (e.g. with call deflection active).

☞ Please pay attention to typical properties of internet telephony. Please also note that your router will have impact on internet telephony and that it will have to be programmed accordingly.
So for instance you cannot use two tiptel 83 VoIP via the same router as external (WAN) extension at a tiptel.com telephone system unless that router supports Hairpin.

In this case you will have to use another tiptel.com telephone system as external sub system to be able to use more than one SIP telephone which can also call each other.

Incoming calls

Incoming calls will be signalled acoustically and optically.



To take the call press the key or pick up the handset.
Use the keys and to adjust the ringing signal while the telephone is ringing.

Reject a call

In case you wish to reject a call please press the c key, "Reject".

To place a call

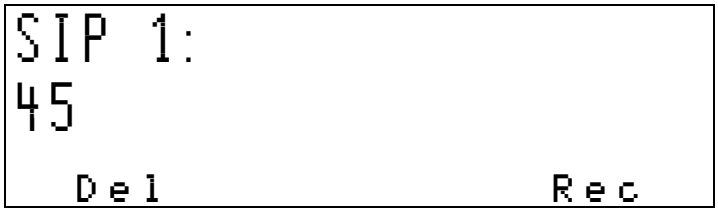
With outgoing calls always the first SIP account that was set up will be pre-selected. In case you set up more than one SIP account and you programmed the function keys as account selection keys you can select another account. In case you activated "Automatic Server Detection" and that account is currently not active then the next account will be used.

Automatic external line access

In case your tiptel.com telephone system was programmed to provide automatic external line access to that provider, in order to be able to place an internal call you will have to dial the code number as a prefix and then dial the internal number before you pick up the handset or press the key.

Dialling

	Pick up handset and wait for dial tone.	
0 ... 9	Enter the telephone number.	The digits entered will be displayed and be dialled according to Digital Map and Rules (e.g. after concluding the entry by #.
	To re-dial the last number dialled press Re-Dial .	The last number dialled will be dialled again.



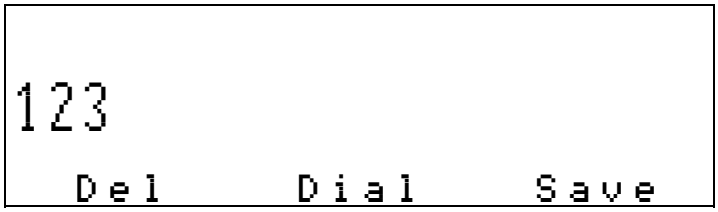
In case you set up more than one SIP account and you programmed the function

keys as "Account Selection Keys" *(WEB → VoIP Phone Menu → Function Key Setting)*, then you can select a SIP account via the function keys.

Hold down for 3sec	To activate speaker phone press this key and hold it down for 3 seconds.	The loudspeaker will be switched on and other persons in the room can hear the caller talking.
	To activate/deactivate hands free press the loudspeaker key. With the handset picked up you can toggle between hands free and handset operation by pressing the loudspeaker key.	Hands free operation will be switched on and other persons in the room can hear the caller and talk to the caller.
	The microphone can be switched on or off, mute key .	The microphone will be switched off.
	To end the call put the handset on hook.	The connection will be terminated.

Indirect dialling (Prepare dialling)

0 ... 9	Enter the number by using the number keys.	Numbers pressed will be shown but not dialled. The # key as dialling conclusion is not necessary.



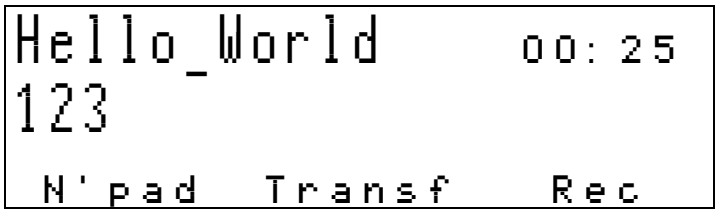
A	With the soft key Del. you can delete the last digit entered.	
C	With "Save" you can save the number to the telephone book.	See page 77

	To dial the number entered pick up the handset.	The connection will be set up. You can have your call.
B	or Press "Dial".	

☞ It is not possible to select a SIP account while preparing the dialling.

In call state

In call state there are several options for actions that can be performed.

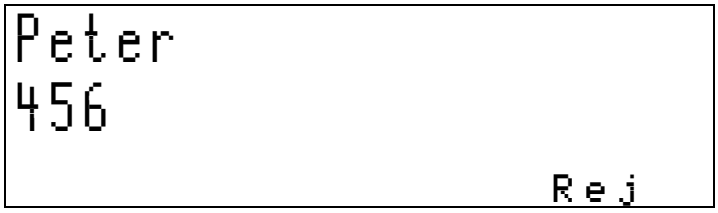


Query

R	Press "R"	Dial tone
	Call the number of the person you wish to call	Caller takes the call, have your query
#	Terminate the active call by pressing the # key	You are connected to the first caller again.

Call waiting

You have a call. Another party is calling you. The caller's number and eventually his/her name will be shown on the display. You hear the call waiting signal and wish to take that call.



R	Press "R"	The new caller will be taken.
R	Press "R"	You can toggle between the two calls.
#	Terminate the active call by pressing the # key and go to the call on hold.	

In case you wish to reject the call waiting

C	"Reject"	The waiting call will be rejected

You can deactivate the call waiting function:

WEB → VoIP Phone Menu → Phone Setting → Call Service → Enable Call Waiting

Connect

In case your tiptel 83 VoIP is operated at a telephone system you can also connect calls.

R	Press "R"	Dial tone
	Call the number of the person you wish to call	Called party takes the call, you're your query
	Hang up	The parties will be connected

or

B	Press "Transf."	The parties will be connected

☞ Due to technical reasons connecting to external targets has some limitations. Connecting will not work if e.g. different codecs are being used and when the calls to be connected were made via different SIP providers.

Call connecting without notification

You can also connect a call without talking to the target subscriber first. In order to be able to do so under

WEB → VoIP Phone Menu → Phone Setting → Call Service

the option "Enable Call Transfer" must be activated.

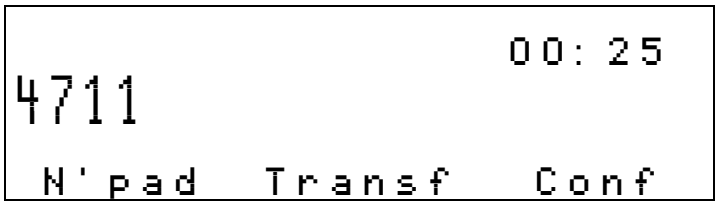
B	Press "Transf."	The parties will be connected.
	Call the number of the target subscriber	Called party takes the call. The parties will be connected.
	Hang up	

☞ Connecting may not work in case the calls to be connected were placed via different SIP providers or different codecs are being used.

3 party conference

When you are having a call and there is another call on hold then you can initiate a 3 party conference.

☞ When your tiptel 83 VoIP is being operated at a tiptel.com telephone system then a 3 party conference can only be initiated from a tiptel 83 VoIP. Due to technical reasons it is not possible to initiate a 3 party conference with a VoIP subscriber from an ISDN or analogue telephone.



C	Press "Conf."	You now can talk to both parties at the same time.

You can terminate the conference as follows:

R	Press "R"	The conference will be terminated and the call (usually the last one set up) will be put on hold.
#	End the active call with the # key and go to the call on hold.	

or

⇩	Hang up	All active connections will be terminated.

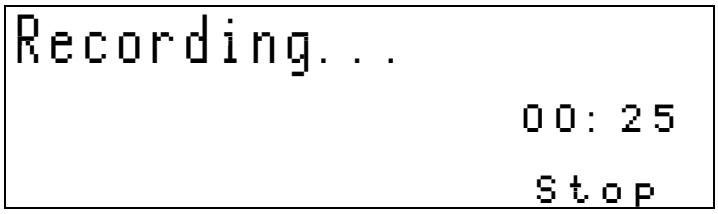
WEB → VoIP Phone Menu → Phone Setting → Call Service → Call Service

"Enable 3 Way Call" must be activated.

Monitoring

Please advise the other party that you are recording the call. Secretly recording of calls may be a criminal offence.

C — Press "Rec." — The call is being recorded and will be saved to "New Messages".



C — Press "Stop." to terminate the recording before the call has ended.

☞ Due to technical reasons it is not possible to use the monitoring function of the optional VoiceMail system of your tiptel.com telephone system.

Notes

You can make a note on the telephone number while having a call.

A — Press "Note"

0 ... 9 — With the number keys you may enter numbers or letters.

Entering asterisk or hash

A

Press "<<" to terminate your note

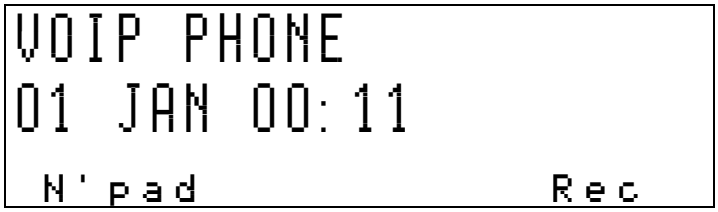
B

Press "Del.." to delete the last character

C

Press "Save" to save the telephone number temporarily

After ending the call you can transfer the noted number into the telephone book.



A

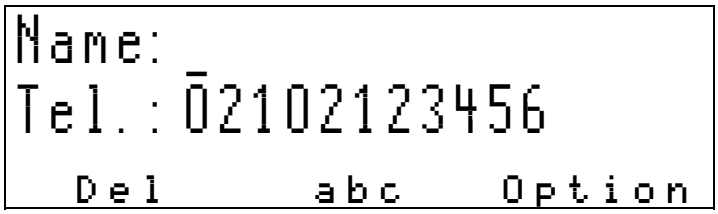
Press "Note" to see the number.

C

Press "Del." to delete the note.

B

Press "Save" to save the number to the telephone book.



Please proceed as described on page 78.

Speaker phone, hands free

Instead of using the handset you can also set up a connection or take a call by using the hands free operation mode. In hands free mode the handset will have no function.

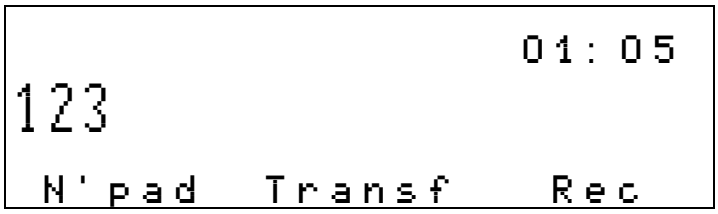
Press loudspeaker (same as picking up the handset).

The display will show the hands free icon. You will hear the dial tone and can place your call.

For switching from hands free to handset operation simply pick up the handset.

You can continue your call using the handset.

During a call you can toggle between handset, hands free and speaker phone operation.



To switch from handset to hands free press loudspeaker and hang up.

You can continue your call in hands free operation.

hold down for 3 seconds

To activate speaker phone operation press and hold down loudspeaker for 3 seconds.

The loudspeaker will be switched on. Persons in the same room can monitor the call.

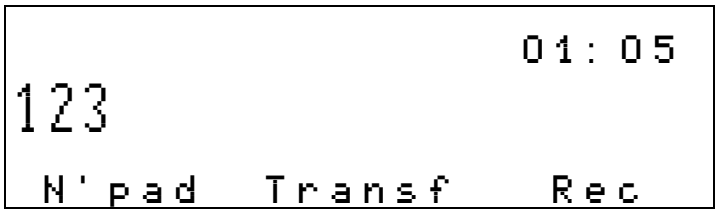
To switch of speaker phone operation press loudspeaker twice.

Headset

The optional headset can be used to place or take telephone calls without any interference.

	Press headset (same as picking up the handset).	The display will show the headset icon. You will hear the dial tone and can place your call.

During a call you can toggle between headset, hands free, and speaker phone operation.



	To switch from headset to hands free press loudspeaker.	You can continue your call in hands free operation.
hold down for 3 seconds	To activate speaker phone operation press and hold down loudspeaker for 3 seconds.	The loudspeaker will be switched on. Persons in the same room can monitor the call.
2x	To switch of speaker phone operation press loudspeaker twice.	
or		
	Instead you can also press the "Headset" key.	

Call lists

General

Your tiptel 83 VoIP provides you with three different call lists. Calls in absence , outgoing calls and incoming calls . Each lists provides you with date and time of the call. Phone numbers from the list can be dialled directly. Individual entries or the whole list can be deleted. Entries from the call list can be transferred to the telephone book.

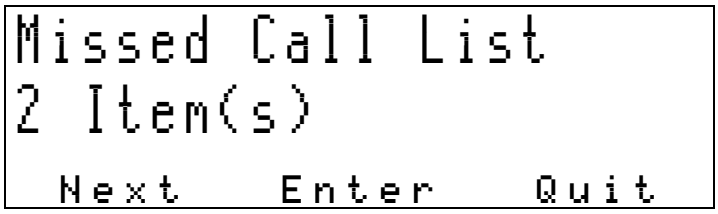
☞ As soon as you looked at a call from the list "Calls in absence" that call will be shifted the list "Incoming calls".

☞ The MWI LED will be flashing, as long as there are call in the list "Calls in absence".

Open call lists and place calls

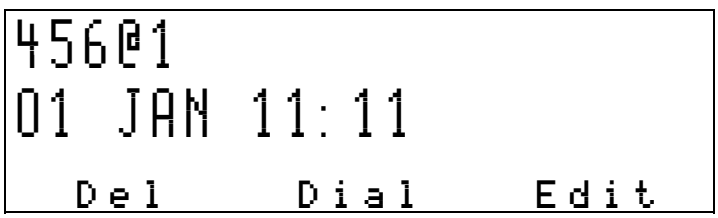
Press list key.

The display will change to the call list selection menu.



Calls in absence

Press "Enter"



Options

With the cursor keys (up/down) you can browse through the entries.

The latest call will be on top of the list.

Press "Dial" and then "Call" to call back the caller.

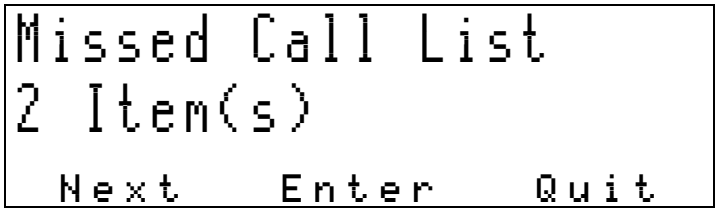
Press "Edit" to transfer that entry into the telephone book, see page 83.

Pres "Del." and on confirm "One" to delete the entry or "All" to delete the complete list.

Incoming call

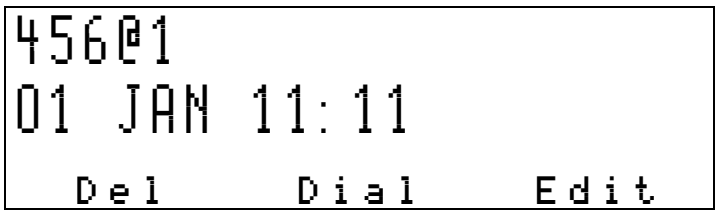
Press the list key.

The display will change to the call list selection menu.



Press the "Down" cursor key to go to "Incoming calls"

Press "Enter"

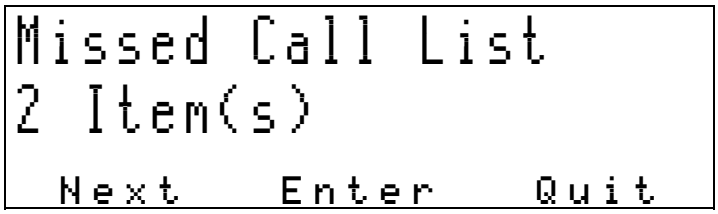


Options please find on page 78.

Outgoing call

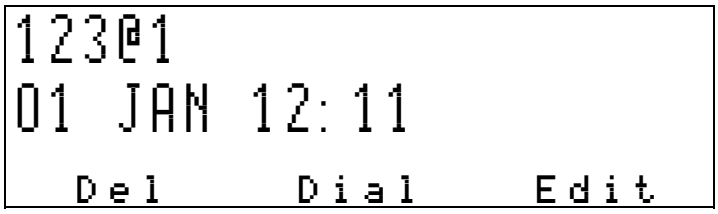
Press the list key.

The display will change to the call list selection menu.



Press the "Down" cursor key to go to "Outgoing calls

Press "Enter"



Options please find on page 75.

Telephone book

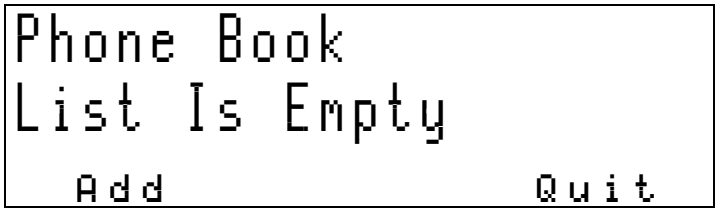
WEB → VoIP Phone Menu → Phone Setting → Phone Book

With your tiptel 83 VoIP you can manage up to 100 individual telephone book entries with name and number independently from your telephone system. Each entry can be assigned with a SIP account for outgoing calls and an individual ring tone.

Enter a new telephone book entry

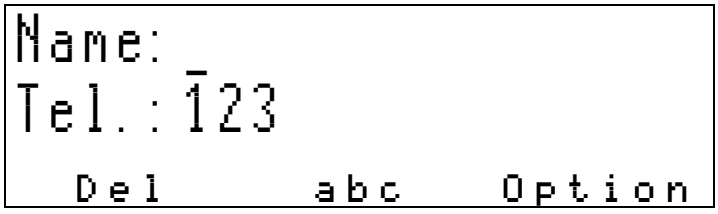
tiptel 83 VoIP in stand by:

Pres "Phone book"



A

Press softkey "Add"



A

Use the softkey "Del." to delete the last character.

With this softkey you can toggle between upper case, lower case and digits.

Pressing "Options" provides you with the following selection:

1: OK – Save entry
2: Character – Enter special characters , . : $ % & ( ) < > [ ] ~ ! _ = + - ?

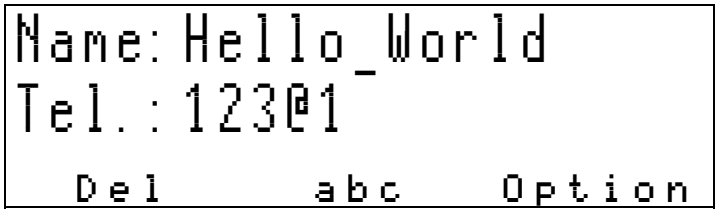
Use the number keys to enter letters or digits.

Enter asterisk or hash

Using the cursor keys up/down you can toggle between name, number, and ring

Using the cursor keys right/left you can move the cursor.

Assigning a SIP account

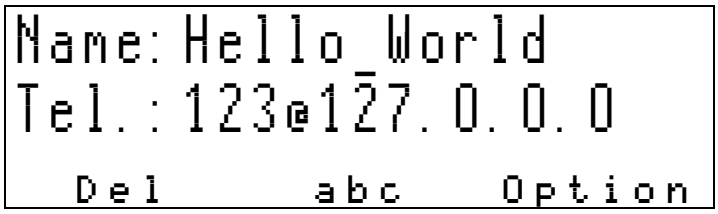


At the end of the telephone number in the telephone book add an "@" with the index of the desired SIP account.

Press "Option" and with 1: OK – save entry

Assigning IP addresses, direct call

With telephone book entries you can also enter a direct call when the IP address of the party you wish to connect to is know to you.



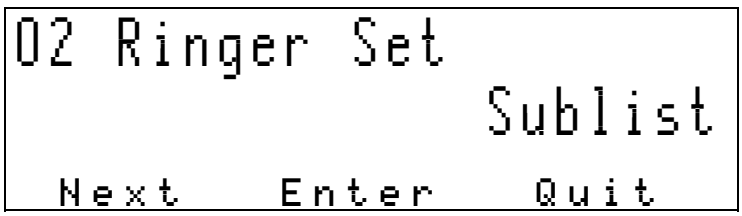
At the end of the telephone number in the telephone book add an "@" with the address of the desired SIP telephone.

The dot of the IP address you can enter as follows:

C	Press "Option" 2: Character – Enter special characters	', . : $ % & ( ) < > [ ] ~ ! _ = + - ?
	Use the cursor key to select the dot.	
B	Press "Enter"	Dot will be added
	Enter IP address	
C	Press "Option" and with 1: OK – save entry	

Select ring tone

In the settings menu, use the cursor key "Down" to go to "Ringer Set"



Use the cursor key "Down" to select "Ringer Type", then press "Edit"

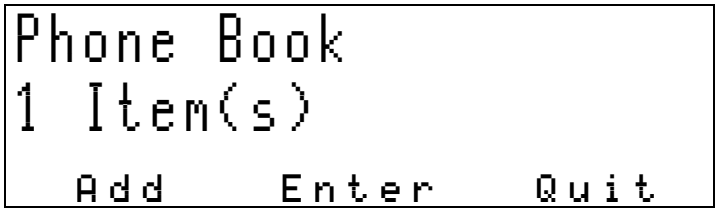
Use the cursor keys "left/right" to select a "Ringer Type", then press "Save", and after that "Esc" to leave the settings menu

While dialling with the handset on hook you can directly create a new telephone book entry:

Use the softkey "Save" to save the entered number to the telephone book.

Call a number from the telephone book

Press "Phone book"



Press "Enter"

Use the cursor keys up/down to select an entry.

or

0 ... 9 Use the number keys to select a letter

B Press "Enter"

B Press "Dial" The number will be dialled

Edit/delete a number from the telephone book

Press "Phone book"

B Press "Enter"

Use the cursor keys up/down to select an entry.

or

0 ... 9 Use the number keys to select a letter

A To delete press "Del." Upon confirmation press "One" to delete the selected entry or "All" to delete all entries.

B To edit press "Enter

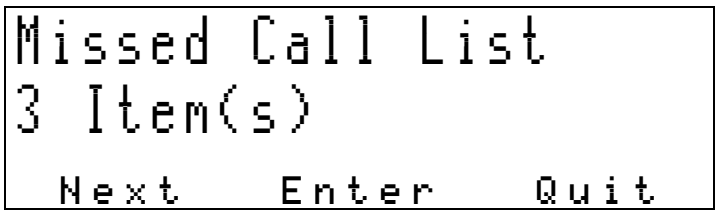
A Press "Edit"

Editing or saving is done in the same way as creating a new telephone book entry (page 78).

Transfer a telephone book entry from a list

You can also transfer numbers from the call list or from the redial list.

Example: Call list



B Press "Enter"

C Press "Edit"

Editing or saving is done in the same way as creating a new telephone book entry (page 78).

Answering machine

Voice Memo

Your tiptel 83 VoIP provides you with an easy to use answering machine.

☞ When you are using your tiptel 83 VoIP as a system telephone at a tiptel.com telephone system the optional voice mail system of the telephone system provides you with more options. In such a case you should not use the integrated answering machine.

Individual announcement

You can chose between a pre-recorded and an Individual announcement.

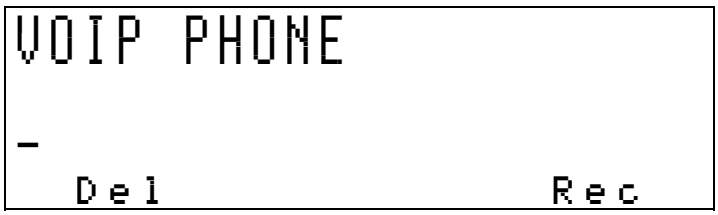
Chose between:

- **Factory default**: The factory default announcement will be used.
- **User defined:** An Individual announcement will be used.

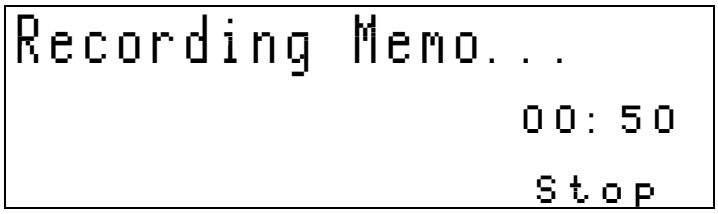
Record an Individual announcement

To record an Individual announcement proceed as follows:

Pick up handset and wait for dial tone.



C	Press "Rec"	Rec Voice Memo?
A	Press "Yes"	Recording will start immediately after pressing key A.



C — Press "Stop", if you wish to stop recording.

More settings

WEB → VoIP Phone Menu → Phone Setting → Call Service

More settings please perform via the web interface:

Enable Voice Record
On/Off

User-Defined Voice
Select between an individual announcement and factory default announcement

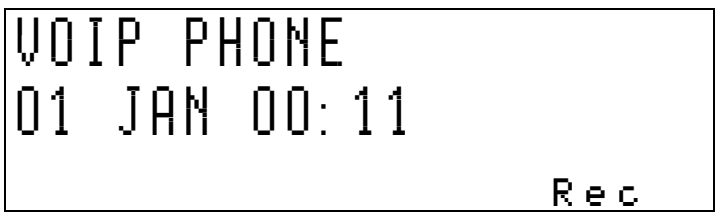
Incoming Record Playing During recording on/off

No Answer Time (sec.).... Answer delay in seconds

☞ This delay also applies to automatic call accept and call forwarding

Recording on/off

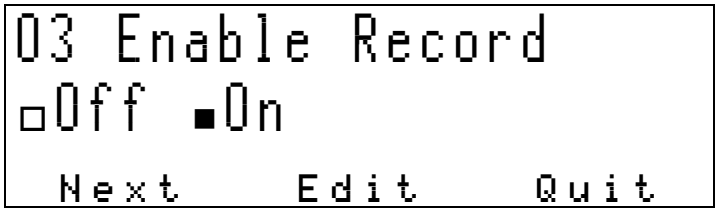
⇩ On hook, hands free off



C

Press "Rec"

With the cursor key browse to "Enable Record On "

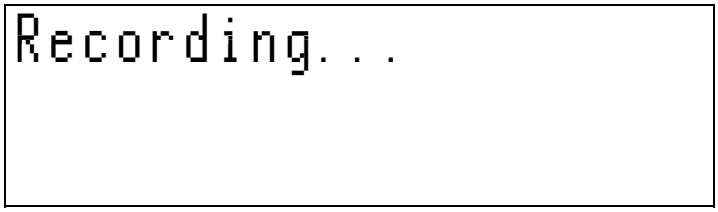


B

Press "Edit" to change the enable record status.

Pick up a call from the answering machine

During recording the following display message will be shown:



Pick up handset and take call..

You can terminate the connection anytime by pressing the "Loudspeaker" key.

Play back/delete messages

New and old recordings will be saved to separate folders. New messages you can play back as follows:

On hook, hands free off

```
VOIP PHONE
01 JAN 00:11
                    Rec
```

C

Press "Rec."

```
01 New
1 Record(s)
  Next    Enter    Quit
```

B

Press "Enter"

```
Record 1
01 JAN 15:22
  Next     Play     Del
```

Next..... Press "next" to get to the next message.

Play. ..... Press "Play" to play back the message.

Del..... Press "Del" and after confirmation press "One" to delete that particular message or "All" to delete all messages.

Messages that already have been played back will be transferred to the folder "Old Records". Management of messages already played back will be performed the same way as explained above.

Annex

Service

You have purchased a modern product of Tiptel granting a continuous level of the highest quality. This is underlined by a certification according to DIN EN ISO 9001.

If, however, problems occur or you have questions on operating the device, please contact your local dealer.

Guarantee

Please contact your local dealer or importer for details of guarantee for non EC countries.

Within the European Community the following guarantee regulation applies:

Your contact for services arising from guarantee obligations is the authorised dealer where you bought the device.

Tiptel will grant a guarantee of 2 years from the date of handover for the material and for the manufacturing of the telecommunications terminal unit.

Initially, the purchaser shall have only the right of subsequent performance. Subsequent performance entails either repair or the supply of an alternative product. Exchanged devices or parts shall become the property of the authorised dealer.

If the subsequent performance fails, the purchaser can either demand a reduction in the purchase price or withdraw from the contract.

The purchaser shall notify the dealer immediately of any defects found. Proof of the guarantee entitlement shall be furnished by standard proof of purchase (receipt or invoice).

The guarantee entitlement shall expire if the purchaser or an unauthorised third party interferes with the device. Damage caused by inappropriate handling, operation, storage or by force majeure or other external influences shall not be covered by the guarantee.

The guarantee shall not cover any consumable material (e.g. batteries) or defects that only slightly impair the value or the usability of the device.

Claims for damage caused by transport shall be asserted to the delivery company.

Notes on settlement:
Repairs can only be conducted by the Tiptel Service. A warranty repair does not prolong the warranty period – neither for the replaced parts nor for the device. This guarantee is not transferable and shall expire if the device is sold on to another party. It shall also expire if the device is interfered with by third parties or if the serial number on the device has been removed or made illegible. There is a guarantee seal on the device. Please do not damage or remove this seal because otherwise, your guarantee will expire.

The General Terms and Conditions of Tiptel, which are part of the contract for a dealer, shall also apply. In the event of a complaint, the defective product shall be sent to the relevant Tiptel subsidiary, the importer or dealer along with a description of the defect and the proof of purchase.

CE mark

This device meets the requirements of the EU directive: directive concerning radio systems and telecommunications terminal devices and the mutual recognition of their conformity.

Due to technical differences among the different countries, however, unlimited warranty for unconditional operation with any telephone company cannot be granted.

Tiptel.com GmbH Business Solutions herewith declares that the equipment complies with all the fundamental requirements of European Directive 1999/5/EC.

You can find further details on the compliance declaration at the following Internet address:

http://www.tiptel.org

Environmental compatibility

No contact with substances harmful to human health can occur if the system is used properly. This device does not contain any batteries. The synthetic materials used in this device consist of partially recycled granulate. Our packaging does not contain any synthetic materials. Only cardboard and paper from partially recycled material is used.
Once your Tiptel product has reached the end of its life time, Tiptel GmbH will take it back free of charge. The device will be dismantled properly and then forwarded to a recycling company.

Trouble shooting

First please try to solve the problem with the help of the table below.

Problem	Possible cause	Solution
Display dead	AC adapter not plugged in .	Check all cables and connectors. You may want to try another mains wall outlet.
Display to weak or dark	Contrast not adjusted properly.	Set contrast.
No sound	Volume set to 0.	Set volume
Hum or some other type of interference from loudspeaker or handset	Electromagnetic interference from e.g. cordless telephone, cordless headset, PC monitor, etc.	Change location of telephone.
No network connection, display shows "WAN not connected"	Network cable not plugged in, wrong network settings	Check network settings, check if tiptel 83 VoIP can be "pinged", check wiring
Call cannot be placed	Wrong SIP account settings, SIP proxy cannot be reached	Check SIP settings, Check SIP proxy settings in your tiptel.com telephone system
Calls are not being signalled	"Do not disturb" (DND) activated Call forwarding programmed in your telephone	Deactivate DND Deactivate call forwarding

Factory default settings

In the table below you may find the most important factory default settings of your tiptel 83 VoIP. These settings may be changed individually. Via the web interface you may reset your tiptel 83 VoIP as follows:

WEB → VoIP Phone Menu → System Manage → Factory Reset

Language	German
Advanced Setting access code at telephone	123
Access data for web browser configuration	Username: admin Password: admin With restricted rights: Username: guest Password: guest
Greeting text	VOIP PHONE
WAN setting	DHCP
LAN IP	192.168.10.1/24
DHCP server	On
SNTP server	209.81.9.7
Time zone	GMT + 01:00
DND (Do not disturb)	Off
Call Forwarding	None
Answering machine	Off
SIP account	Not set
Reregister time	5min
Sip Agent	tiptel 83voip
DTMF	DTMF Relay
Function keys	Command keys
DSP	A-law
Signal standard	German
Timeserver	GMT+1, Berlin, 1hour refresh

Technical specifications

General	
Dimensions (W x H x D)	ca. 230 x 105 x 200 mm
Ambient temperature	0 – 40 °C
Operating voltage	
AC adapter	230 V / 50 Hz
Power consumption in stand by	< 4,5 W

Index

A

AC adapter 4
AC adapter 15
Account configuration 45
Automatic call accepting 36
Automatic external line access 65

C

Call forwarding 35
Call waiting 43
Calls in absence 75
CE mark 89
Coil cord 15
Controls 8

D

Description of the telephone 3
DHCP settings 50
Direct call 80
Direct dialling 65
Display icons 10
DMZ 52
Do not disturb 44

E

Environmental compatibility 89

F

Factory default 45
Factory default 21
Factory default settings 91
Factory default settings 18
Firmware version 63
First steps 15

G

General 3
Gift box 15
Guarantee 88

H

Hands free 73
Hands Free 66
Handset 16
Headset 74
Headset 16

I

Incoming calls 75
Indirect dialling 66
Individual announcement 84
Installation 16
Installing 4

K

Key assignment 5
Keypad password 45

L

LAN settings 48
Language 34
Language settings 19

M

Miscellaneous SIP settings 58
MSG-LED 8
Mute key 66

N

NAT 51
Network Setting 47
Network settings 21

O

Outgoing calls 75

P

PC software 15
Port configuration 51
Ports 51, 59
PPPoE settings 47
Prepare dialling 66

Q

QOS 59

R

Re-Dial 65

Reject a call..... 65
RTP ports 59

S

Safety notes 4
Scope of delivery 15
Server Port 30
Service 88
Set up..... 15
Settings 33
SIP Account 29
SIP account basic settings 53
SIP advanced setting..... 55
SIP Setting..... 53
Software version..... 63
Speaker phone..... 73
Speaker phone..... 73, 74
Speaker telephone..... 66
Special characters 7
Speed dial 41
Speed dial key..... 36
Static network..... 48
STUN 57

T

Technical specifications..... 91
Trouble shooting 90

U

Using the telephone..... 64

V

Version of firmware..... 63

W

WAN settings..... 48
WAN-Connect mode 47

Tiptel.com GmbH Business Solutions
Halskestraße 1
D - 40880 Ratingen
Tel.: 0900 100 – 84 78 35*
Vanity Tel.: 0900 100 – TIPTEL*
Internet: www.tiptel.de
International:
Internet: www.tiptel.com

* (1,49 €/Min. from the fixed network of Deutsche Telekom, different prices from abroad / mobile networks possible)

Tiptel GmbH
Ricoweg 30/B1
A - 2351 Wiener Neudorf
Tel.: 02236/677 464-0
Fax: 02236/677 464-22
E-mail: office@tiptel.at
Internet: www.tiptel.at

Tiptel AG
Bahnstrasse 46
CH - 8105 Regensdorf
Tel.: 044 - 884 01 80
Fax: 044 - 843 13 23
E-mail: tiptel@tiptel-online.ch
Internet: www.tiptel-online.ch

Tiptel B.V.
Camerastraat 2
NL – 1322 BC Almere
Telefoon: 0900 – BELTIPTEL of
0900 – 2358478 (€ 0,50 p/m, max. € 25,00)
Fax: 036 – 53 678 81
E-mail: info@tiptel.nl
Internet: www.tiptel.nl

Tiptel NV
Leuvensesteenweg 510 bus 4
B – 1930 Zaventem
Telefoon: 0903 99 333 (1,12 Euro / min.)
Fax: 02 714 93 34
E-mail: tech@tiptel.be
Internet: www.tiptel.be

Tiptel sarl
23, avenue René Duguay-Trouin
F – 78960 Voisins-Le-Bretonneux
Tél. : 01 / 39 44 63 30
Fax : 01 / 30 57 00 29
e-mail : support@tiptel.fr
Internet : www.tiptel.fr

CE

5/2009 (engl)
EDV 4935386